

ABSTRACT

A system for the downhole injection of chemical into a well through capillary tubing using a surface chemical pump includes downhole injection valve. The downhole injection valve includes an upstream and a downstream check valve connected in series. The upstream
5 check valve has an adjustable spring bias. The amount of bias is dependent on the nature of the well and the system for inserting chemical through the capillary tube into the well. The lower check valve has a fixed bias and protects the injection valve from the unwanted backflow of gas, fluids or solids.